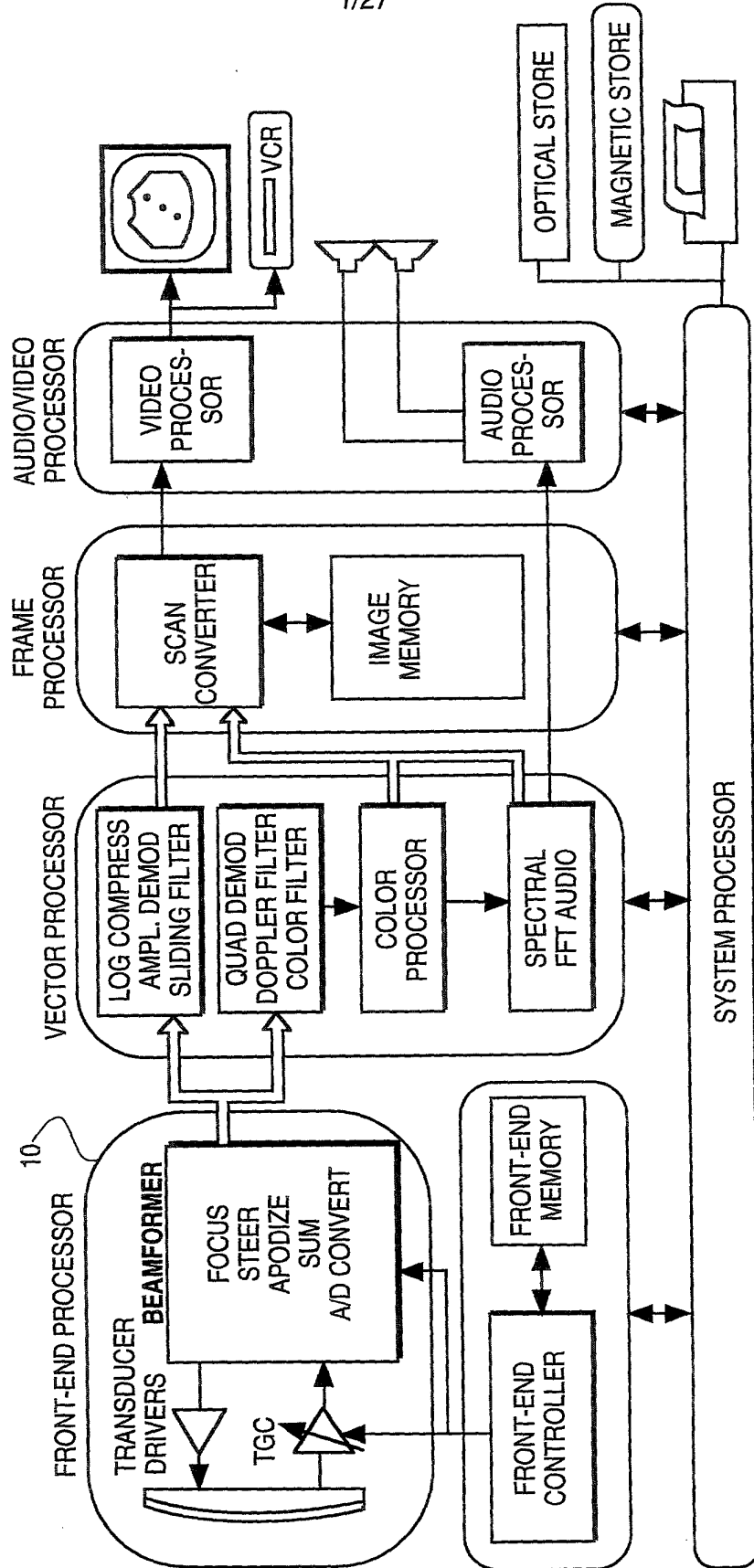


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FIG. 1



ULTRASONIC IMAGING SYSTEM BLOCK DIAGRAM

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FIG. 2
PRIOR ART

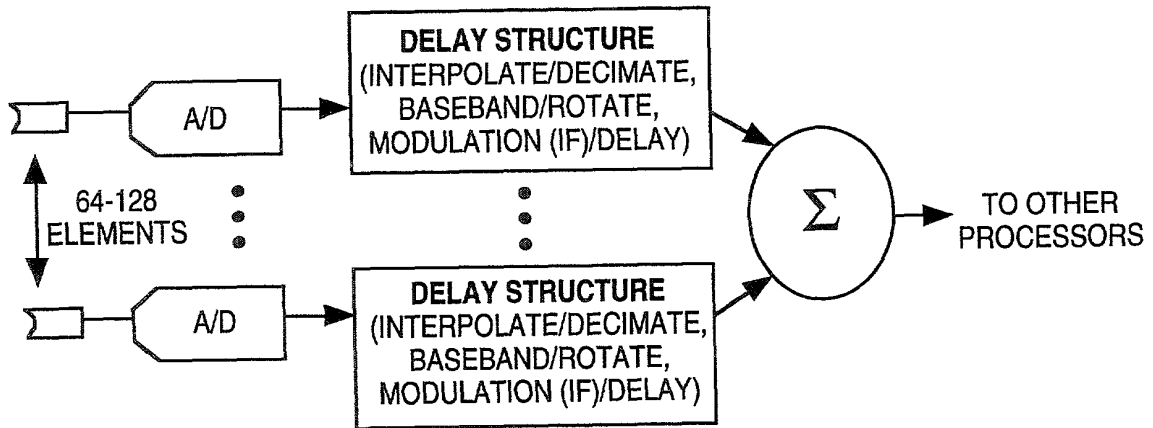
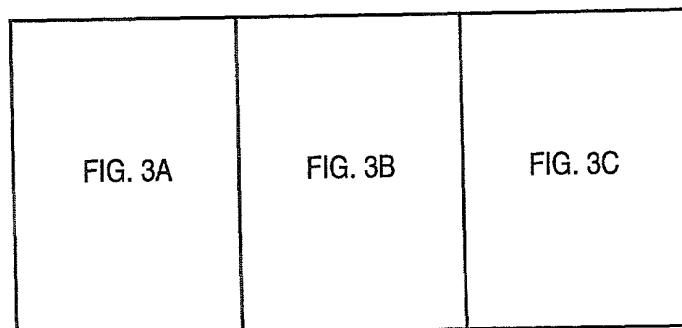
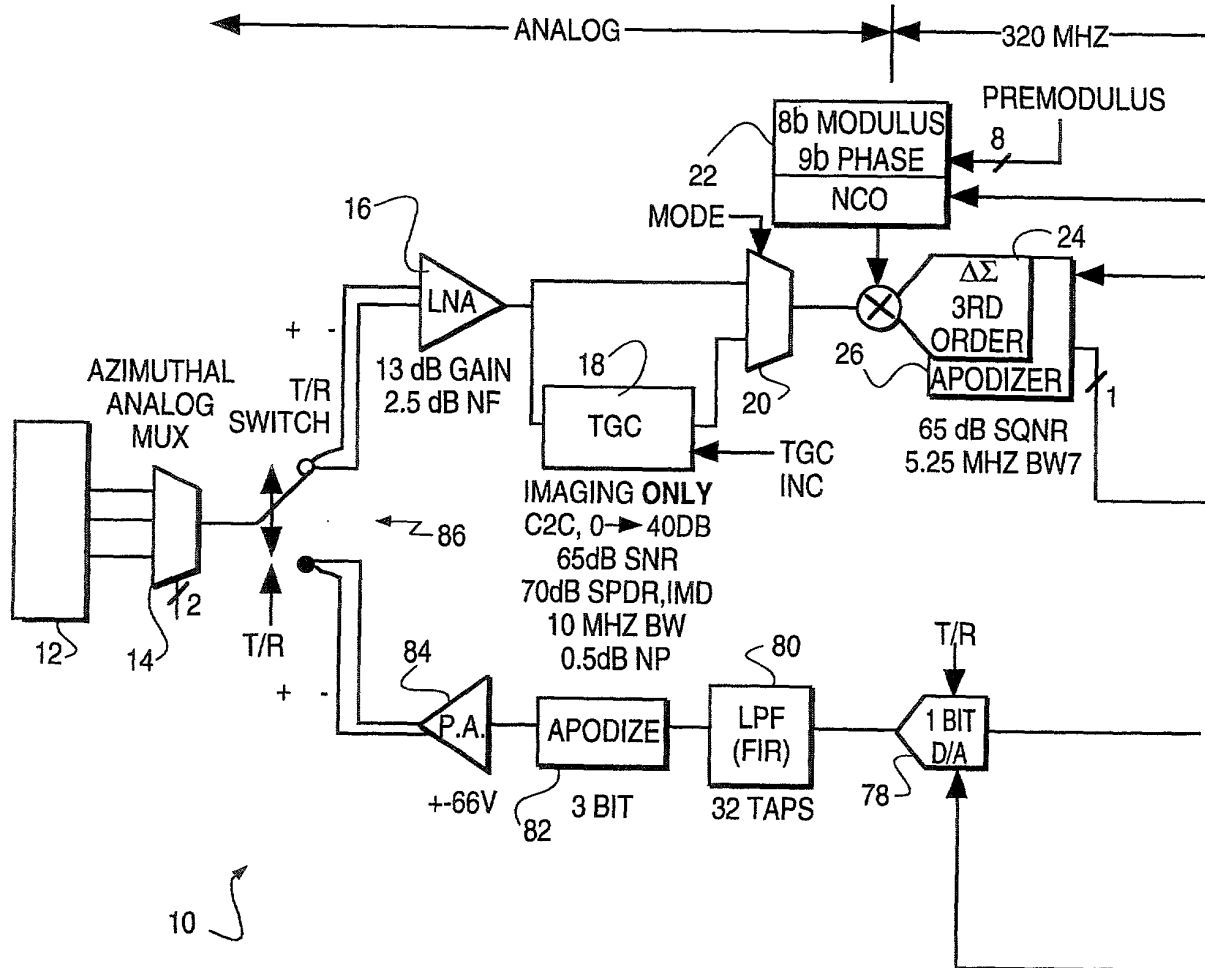


FIG. 3



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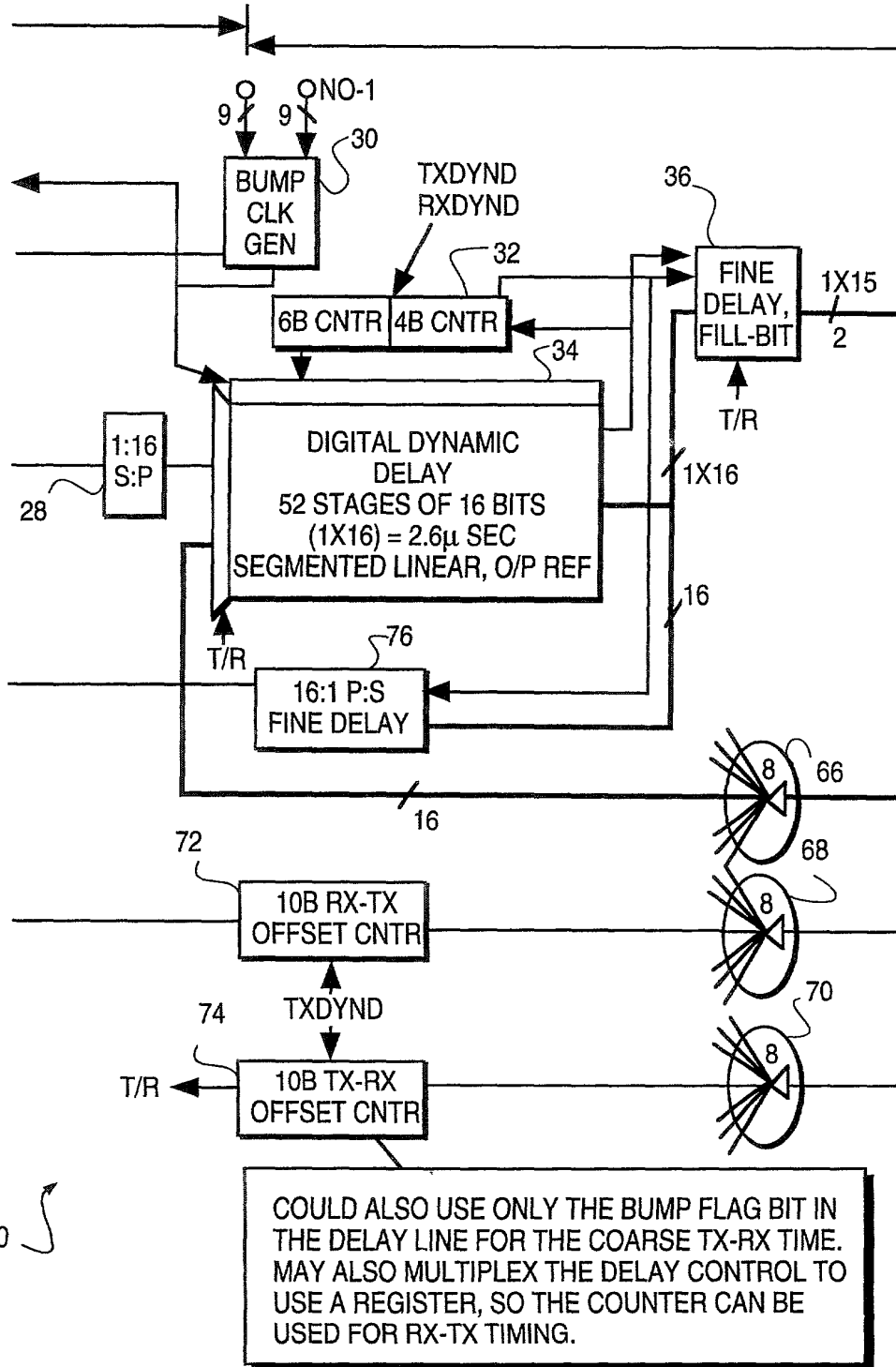
FIG. 3A



LEGEND:	
TEXT SPECIFICATIONS	
→	CONTROL LINES AND CIRCUITS THAT CHANGE DURING ONE BEAM
→	CONTROL LINES FIXED DURING A BEAM-DOUBLE BUFFERED SO PRELOAD DURING A BEAM
→	RARELY IF EVER CHANGES-POWER UP/RESET

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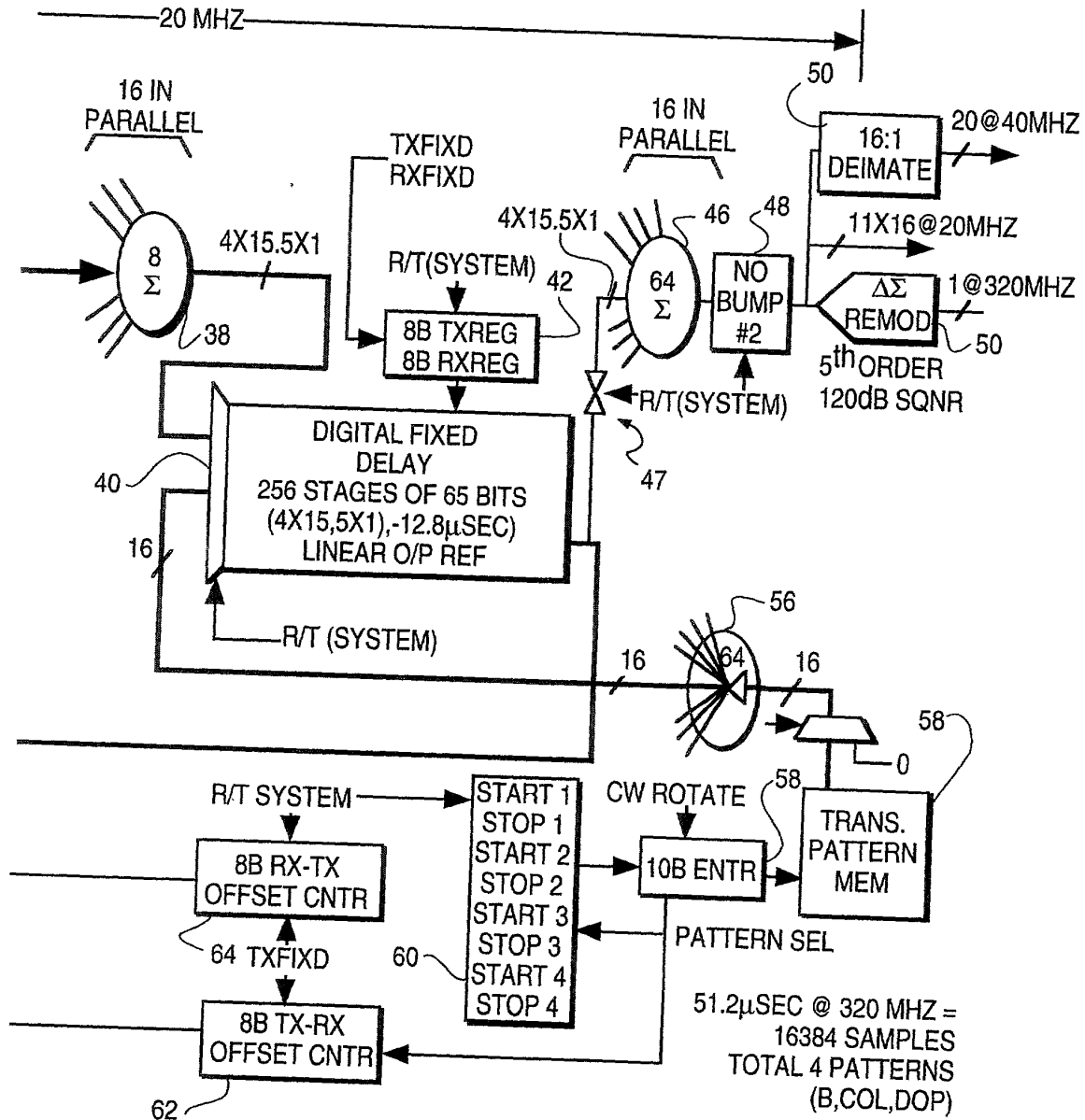
FIG. 3B



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FIG. 3C



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FIG. 4

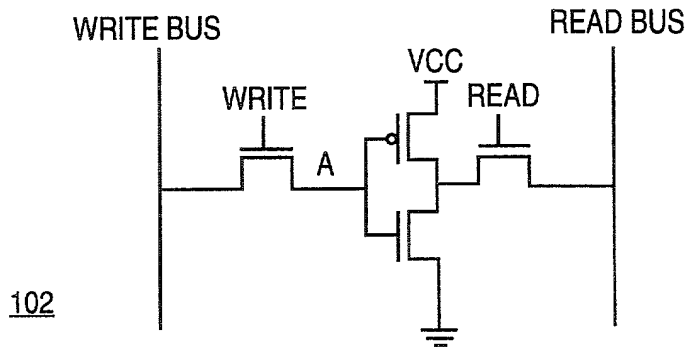


FIG. 5

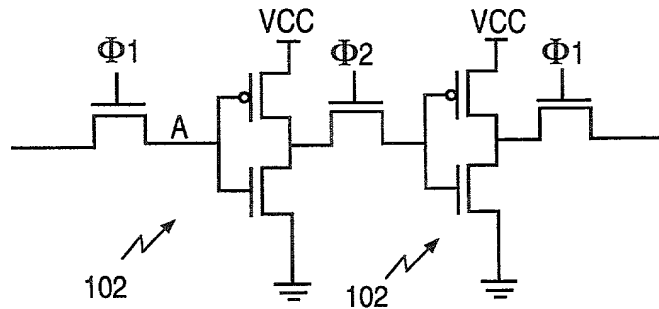
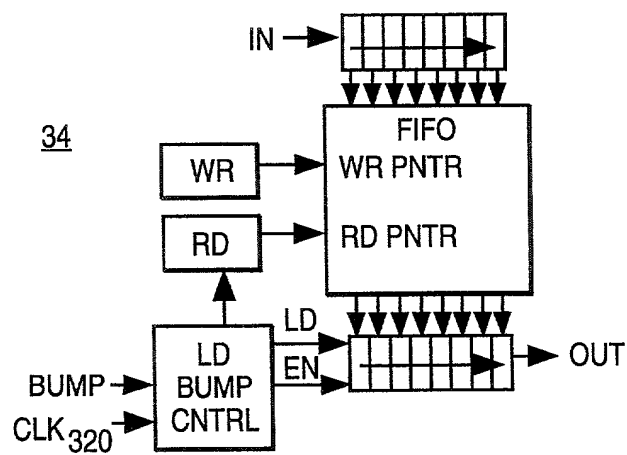


FIG. 6



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FIG. 7A

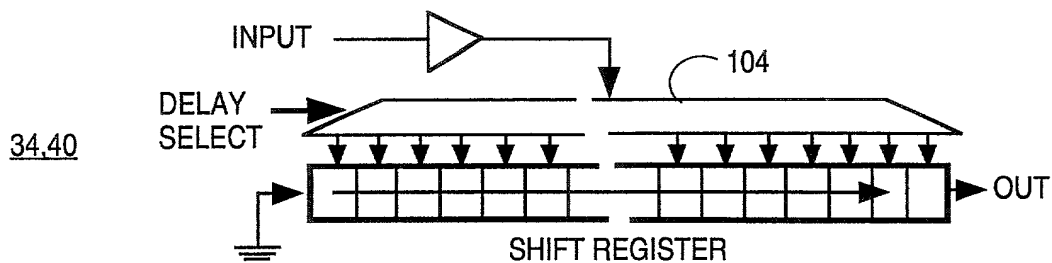


FIG. 7B

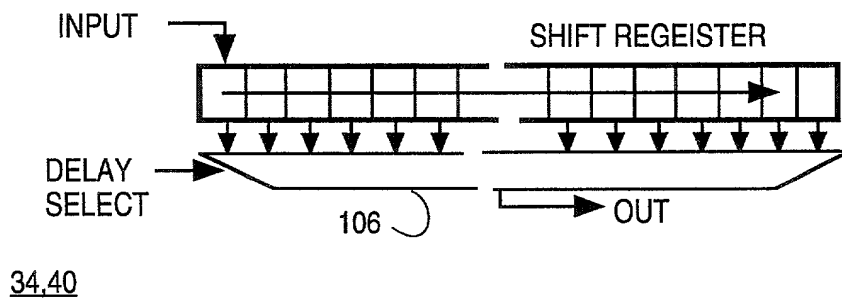


FIG. 8

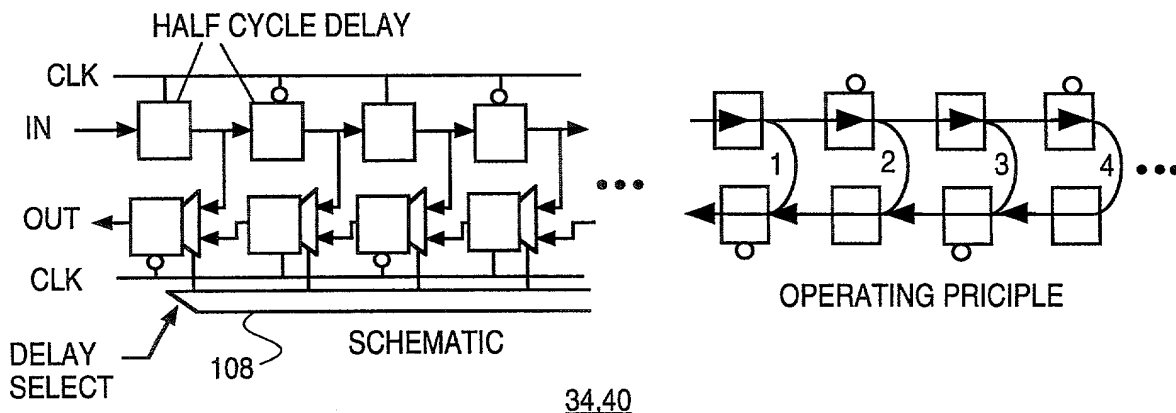
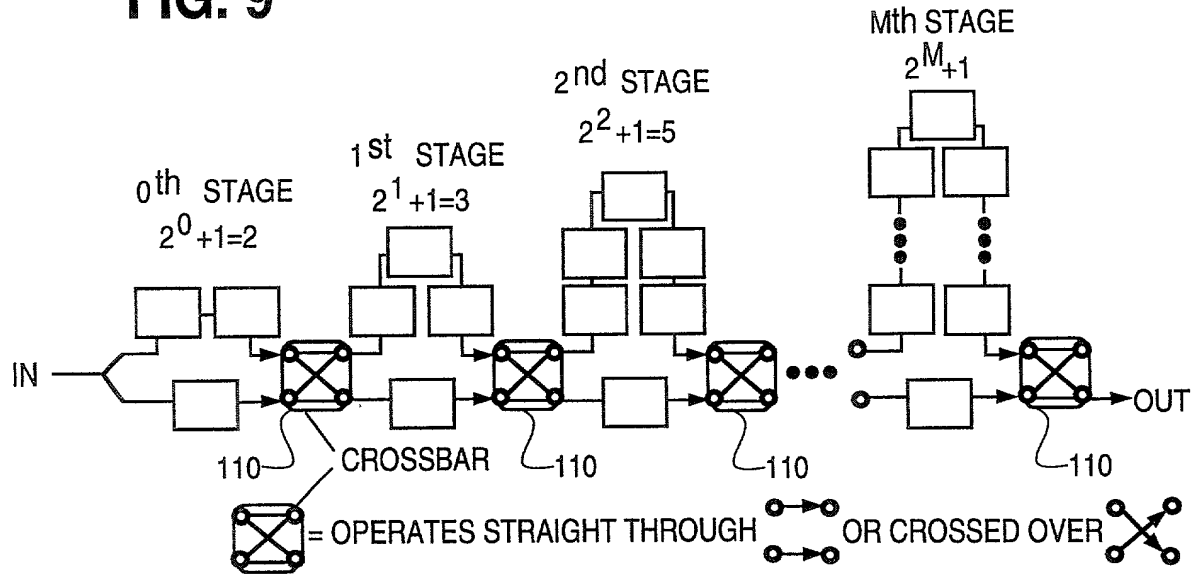


FIG. 9

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34,40

FIG. 10A

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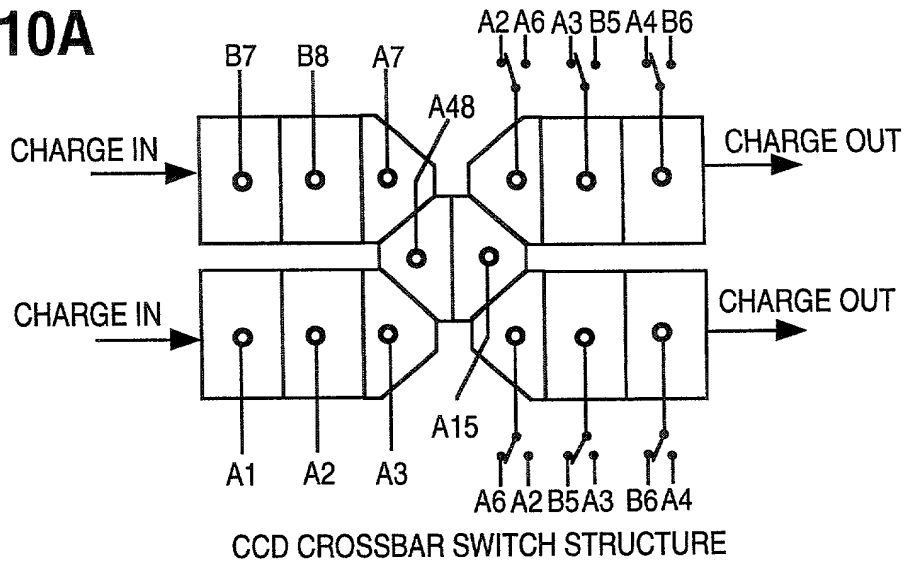


FIG. 10B

A1	A2	A3	A4	A5	A6	A7	A8	B5	B6	B7	B8	A48	A15
1	1	0	0	0	0	0	0	1	1	1	1	0	1
0	1	1	0	0	0	0	0	1	1	1	1	0	0
0	0	1	1	0	0	0	0	1	1	1	1	1	0
0	0	0	1	1	0	0	0	0	1	1	1	1	1
0	0	0	0	1	1	0	0	0	0	1	1	0	1
0	0	0	0	0	1	1	0	1	0	0	1	0	0
0	0	0	0	0	0	1	1	1	1	0	0	1	0
1	0	0	0	0	0	0	1	1	1	1	0	1	1

CLOCK PATTERN

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FIG. 11

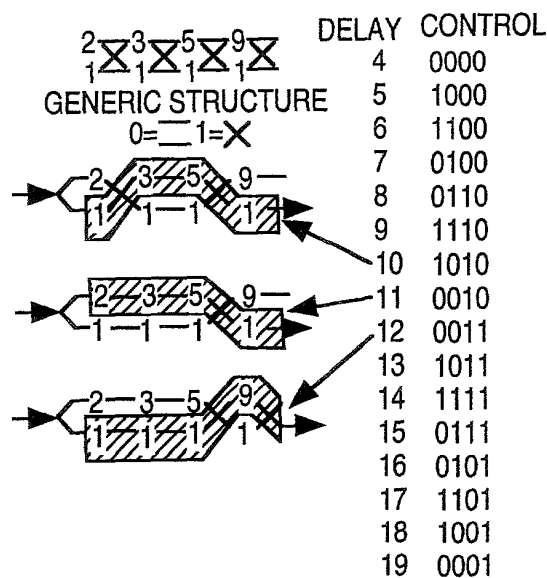


FIG. 12A

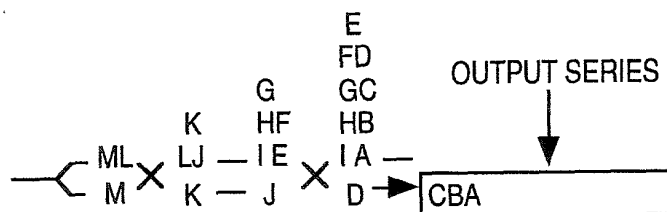


FIG. 12B

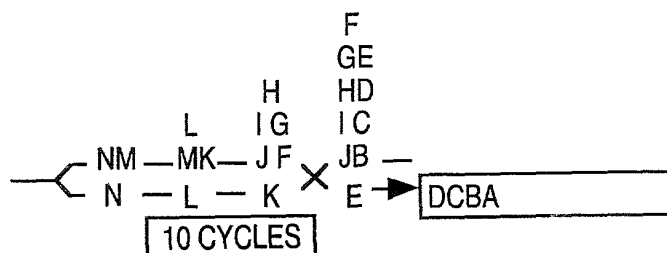


FIG. 12C

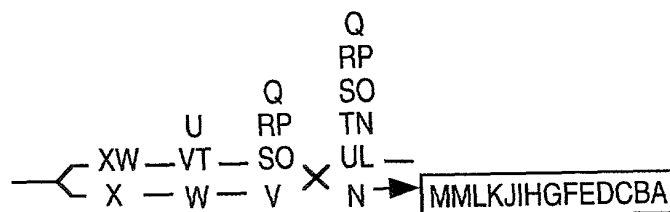
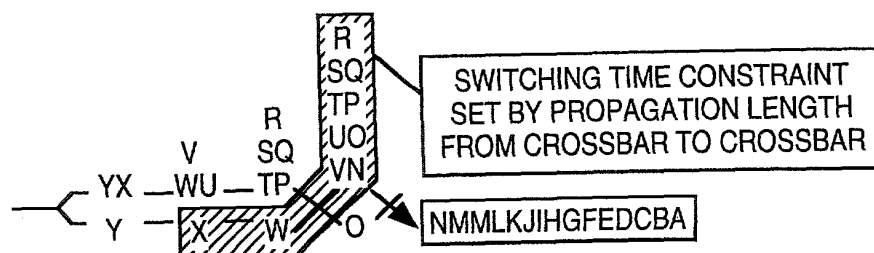


FIG. 12D



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FIG. 13

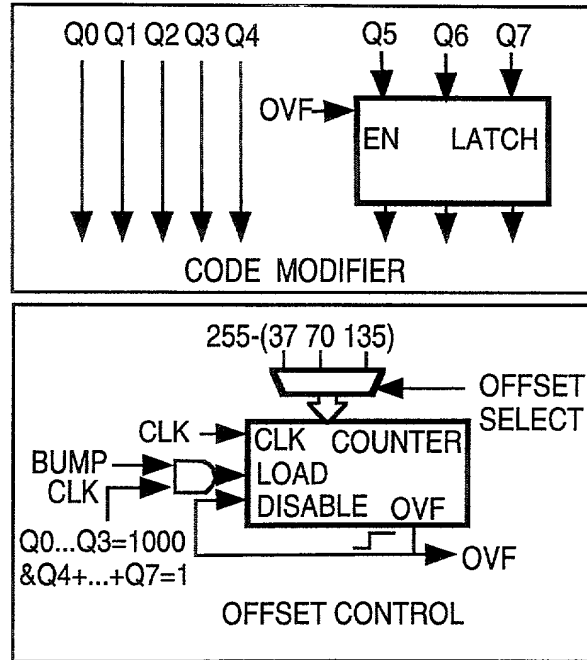
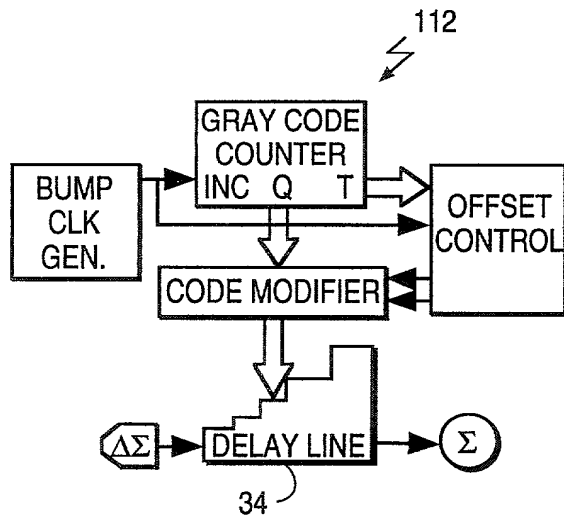


FIG. 14

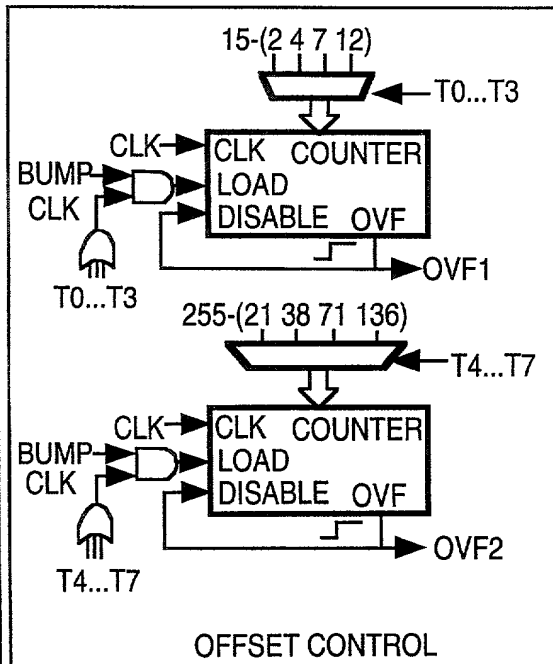
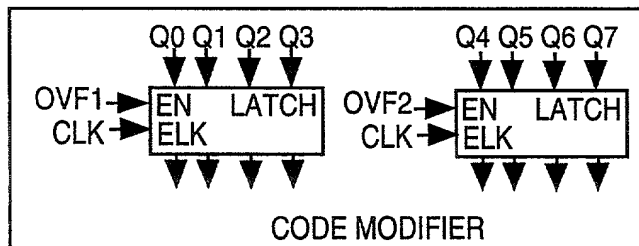
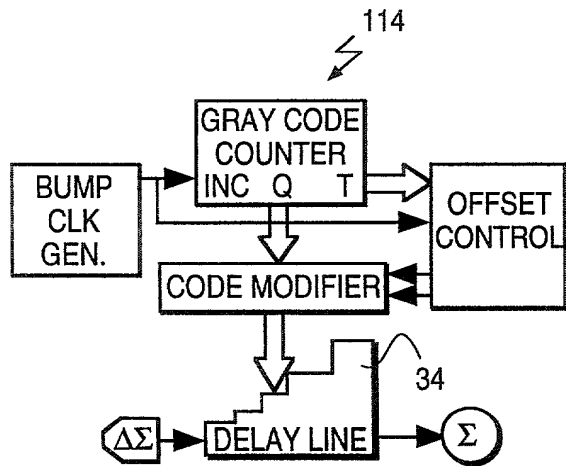


FIG. 13

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FIG. 15

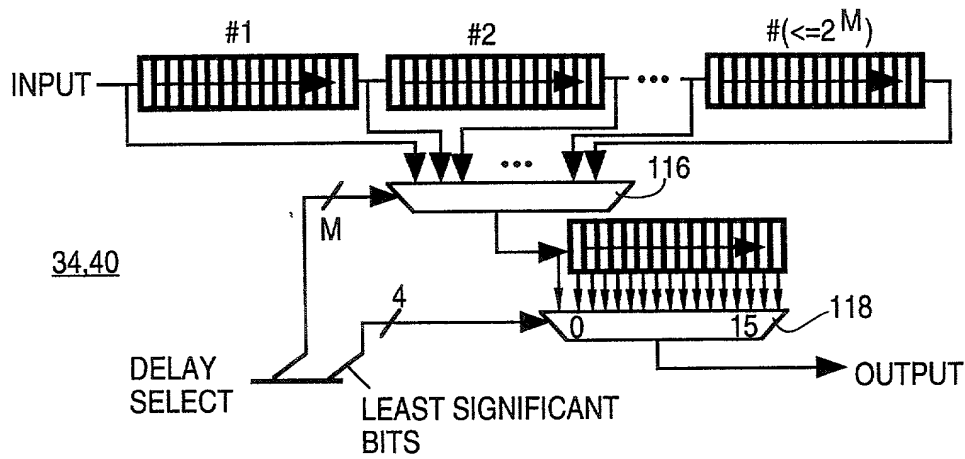
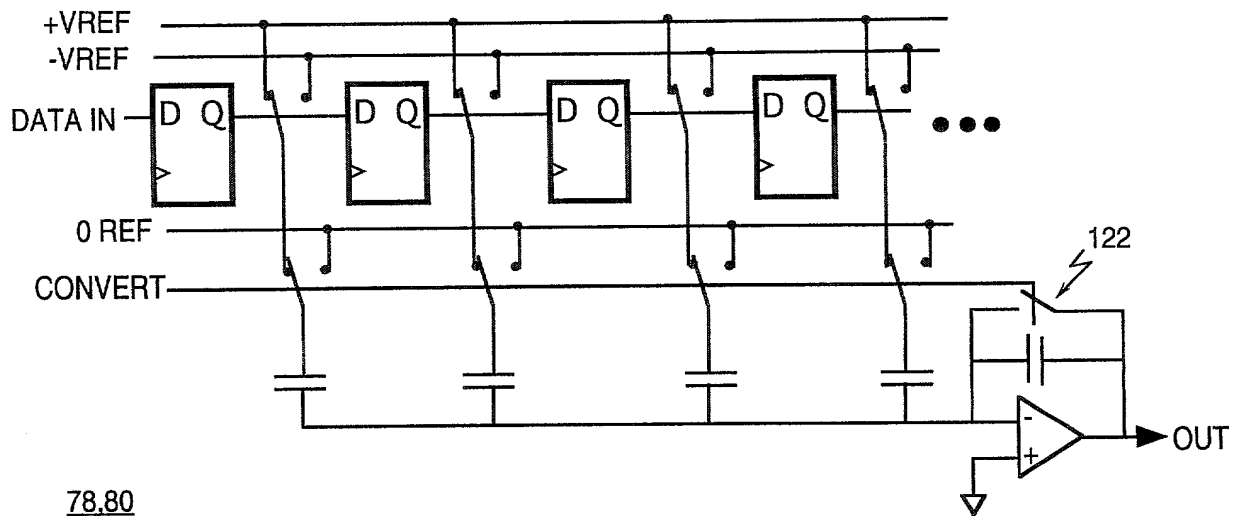


FIG. 16



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FIG. 17

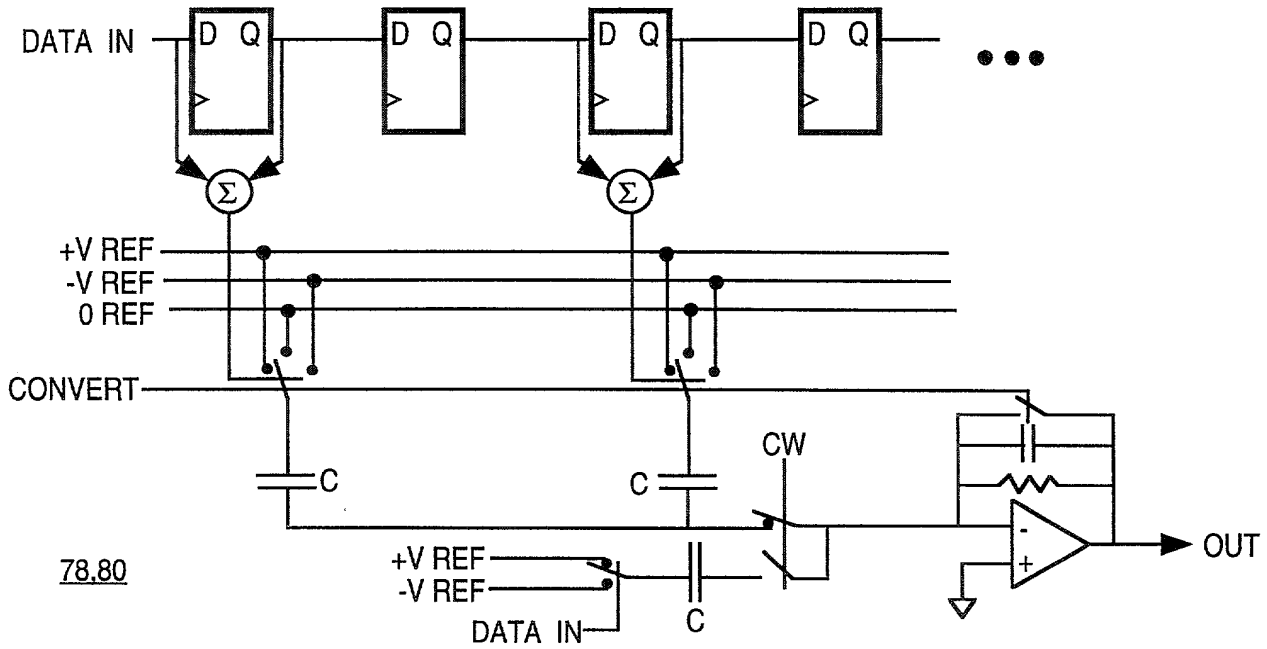
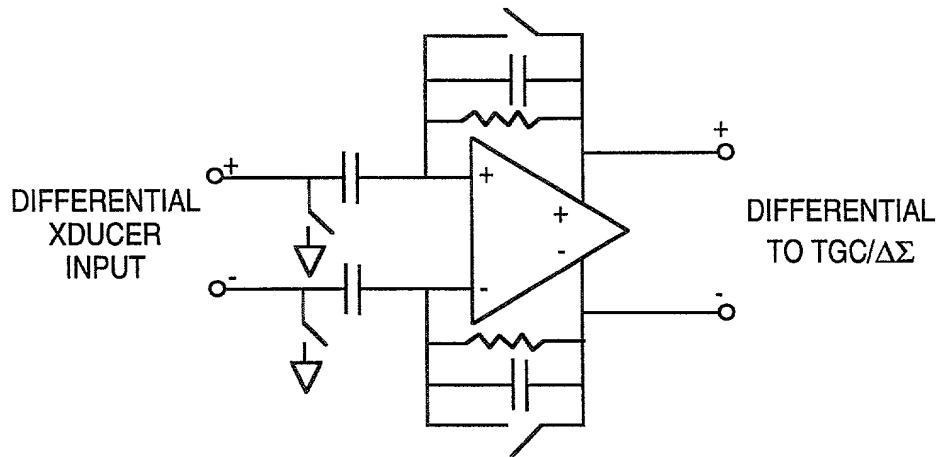


FIG. 18



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FIG. 19

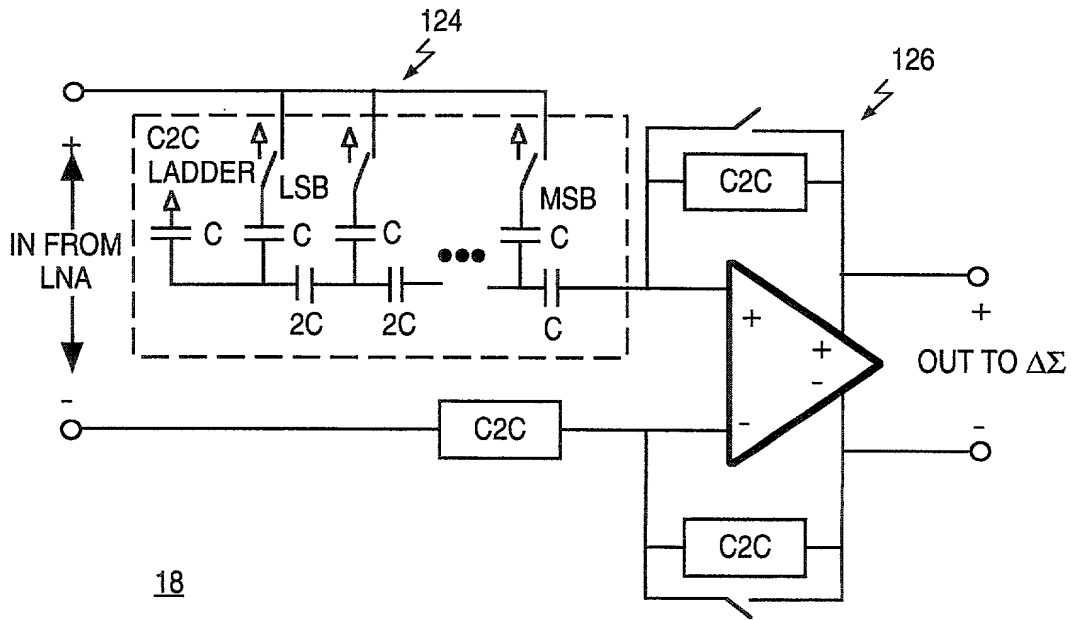


FIG. 19

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FIG. 20A

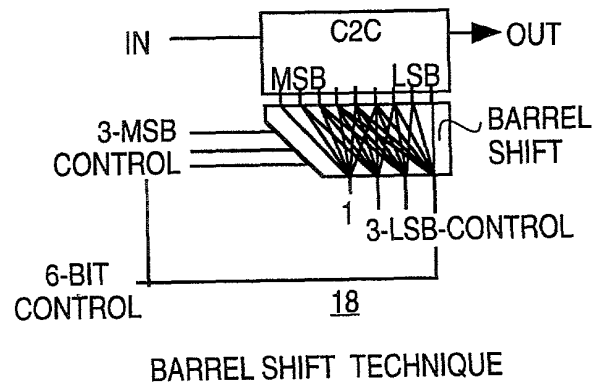


FIG. 20B

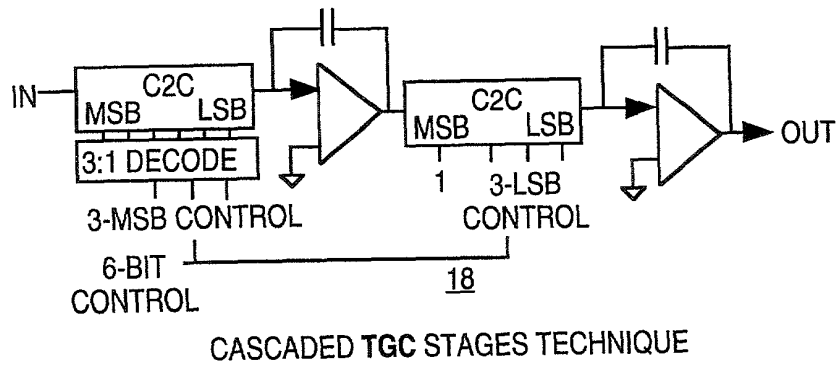
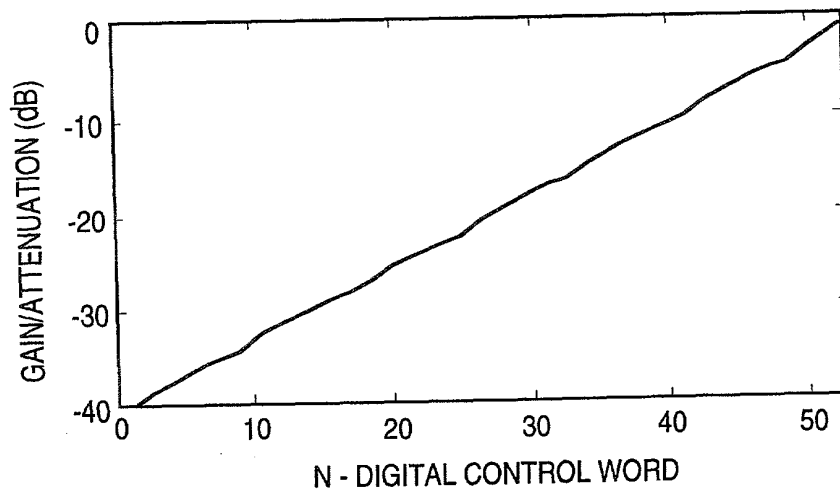


FIG. 21



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FIG. 22

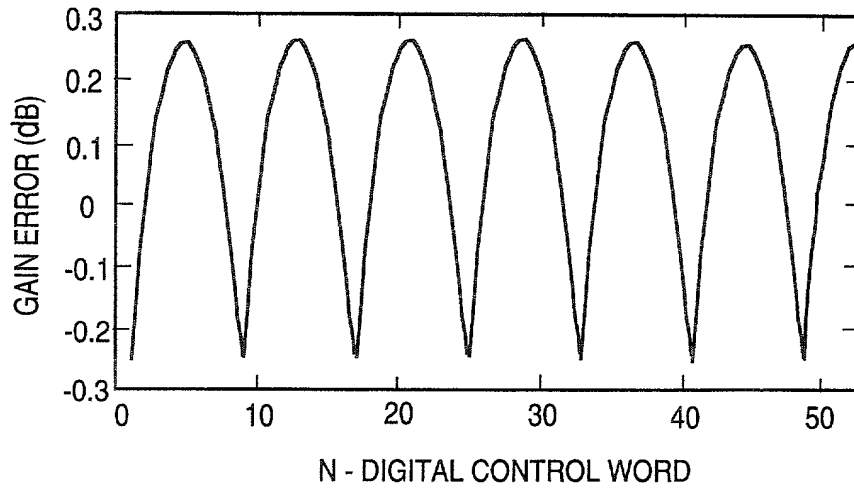
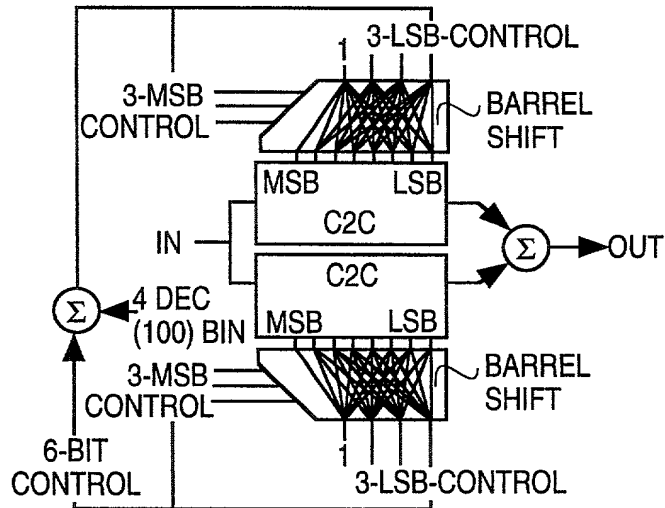


FIG. 23



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FIG. 24

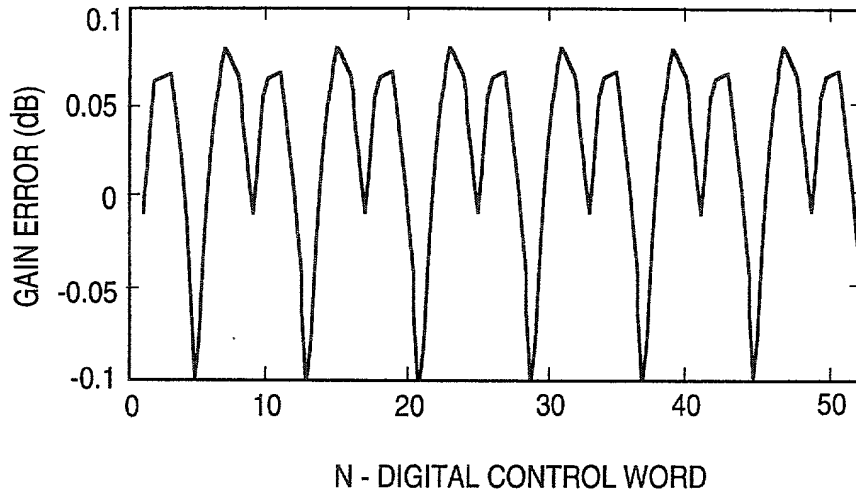
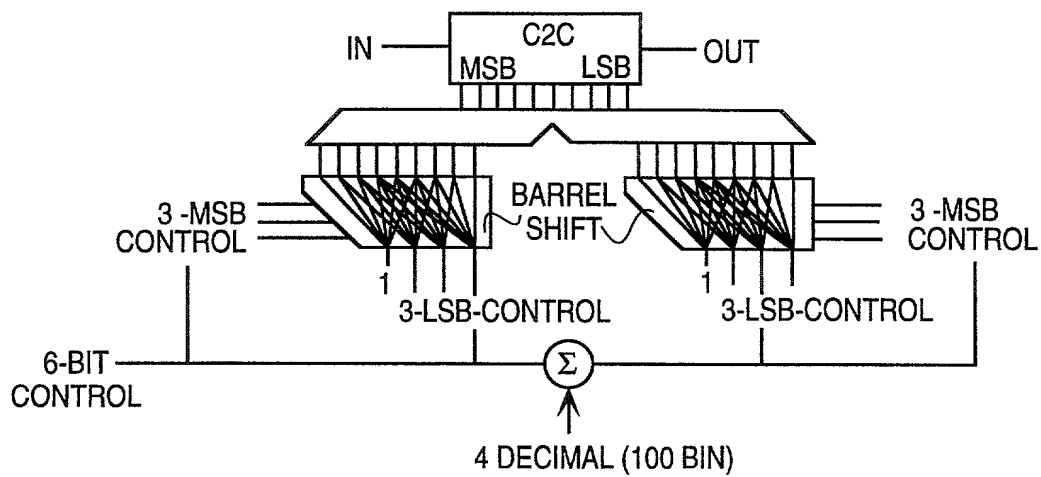


FIG. 25



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FIG. 26A

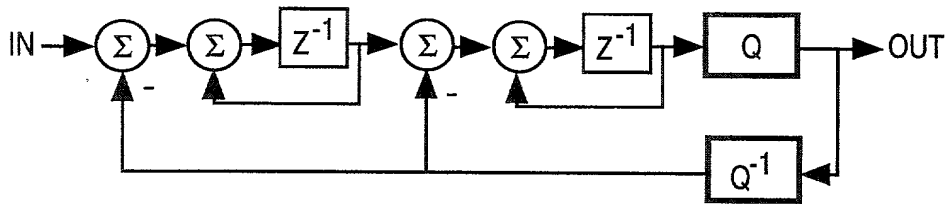


FIG. 26B

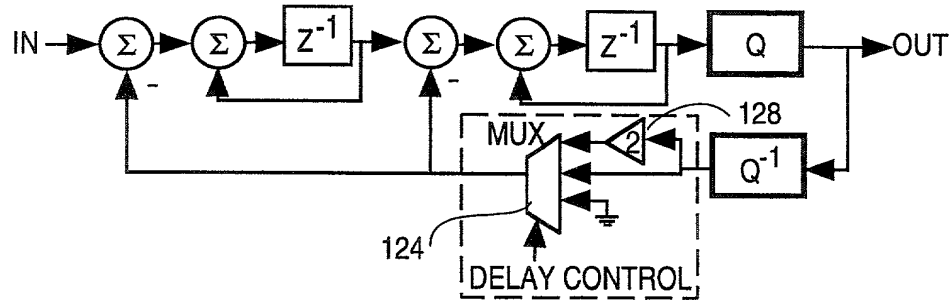


FIG. 26C

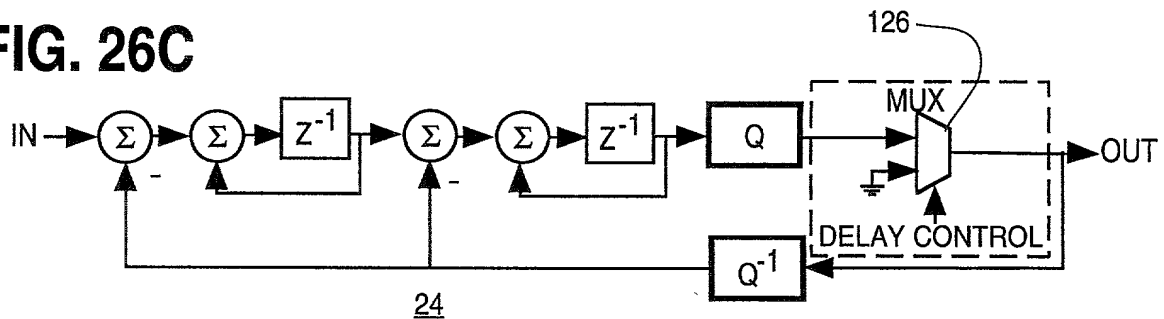
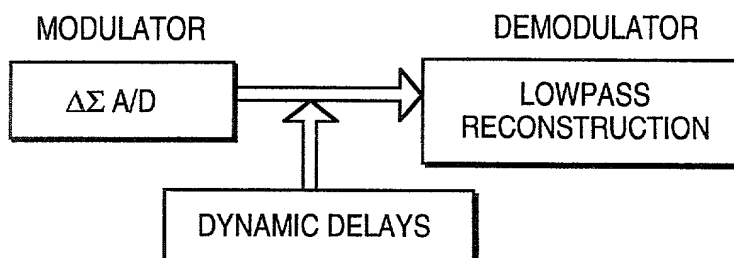


FIG. 27



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FIG. 28

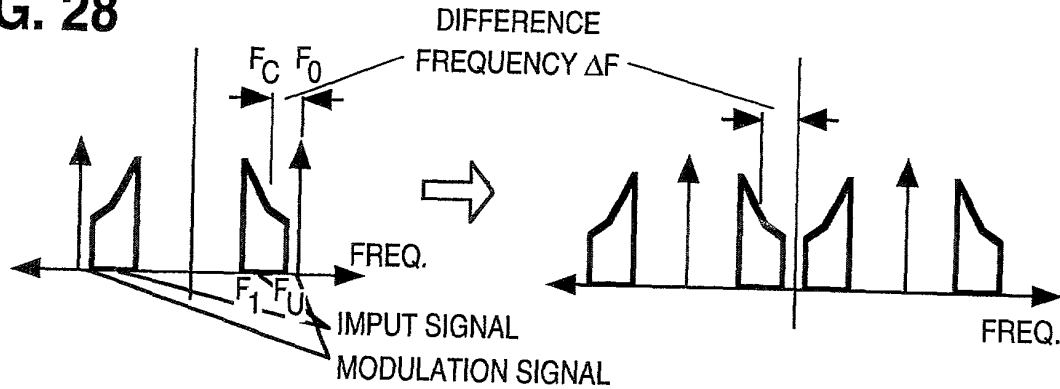


FIG. 29

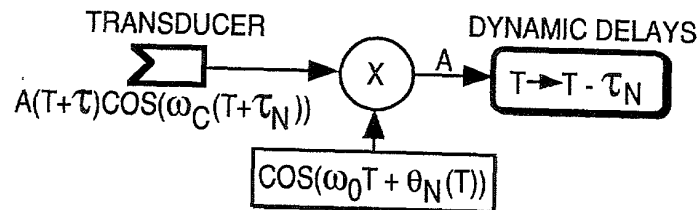


FIG. 30A

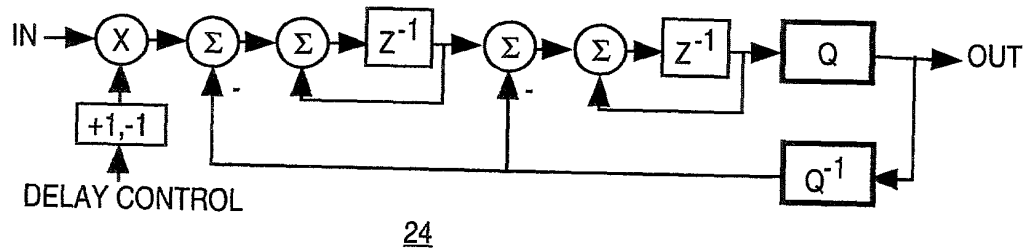
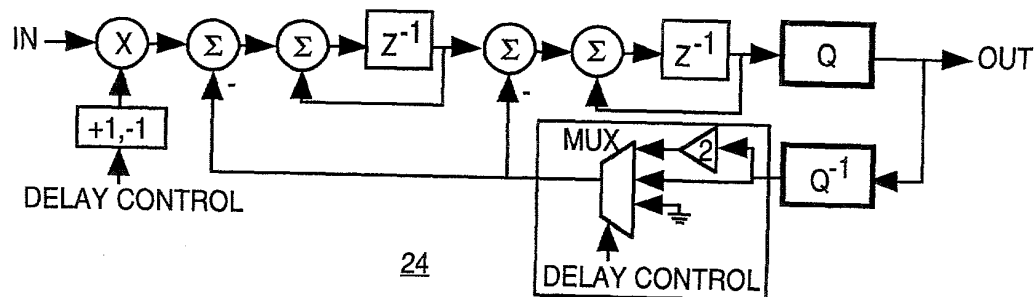


FIG. 30B



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FIG. 31

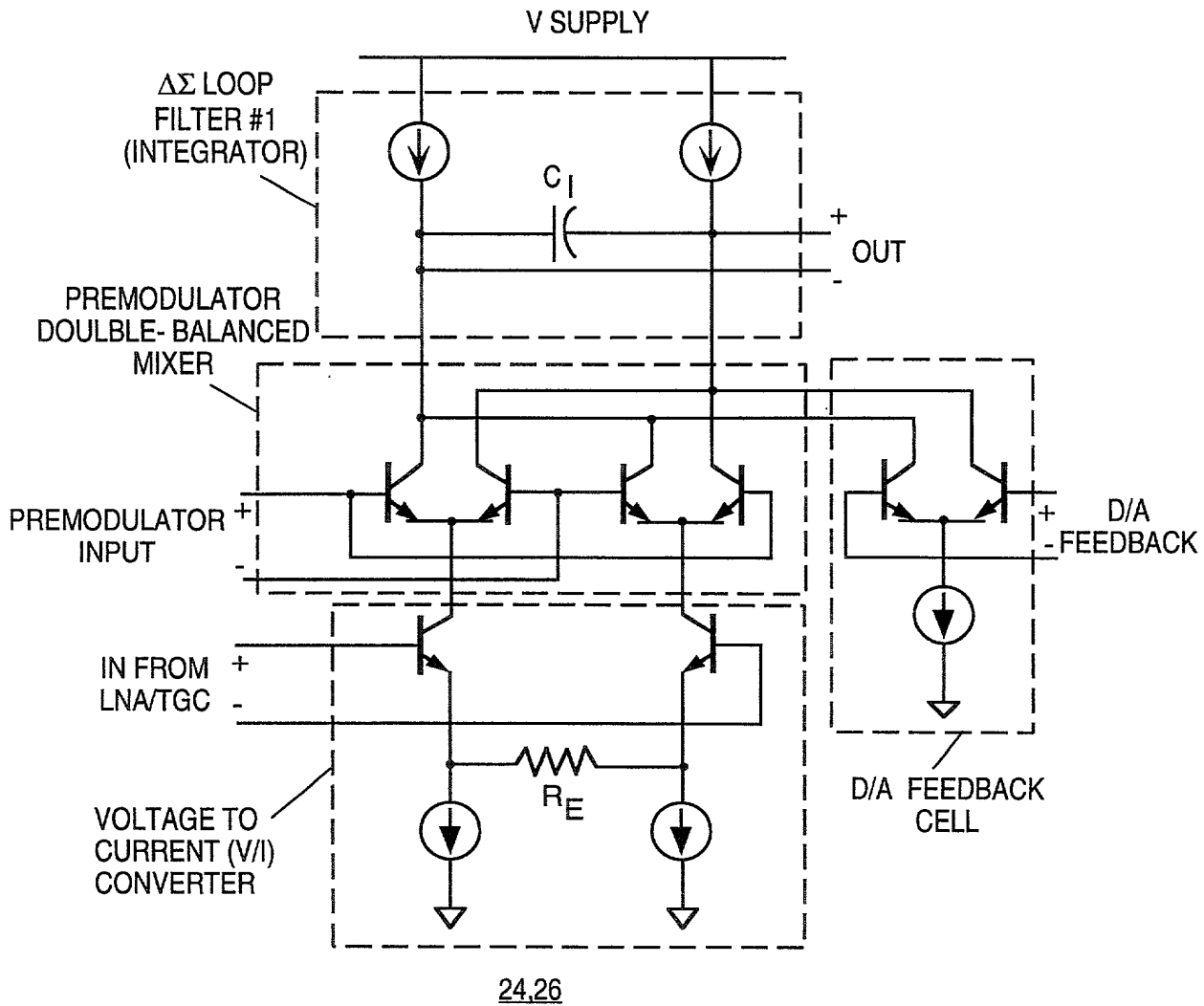


FIG. 32

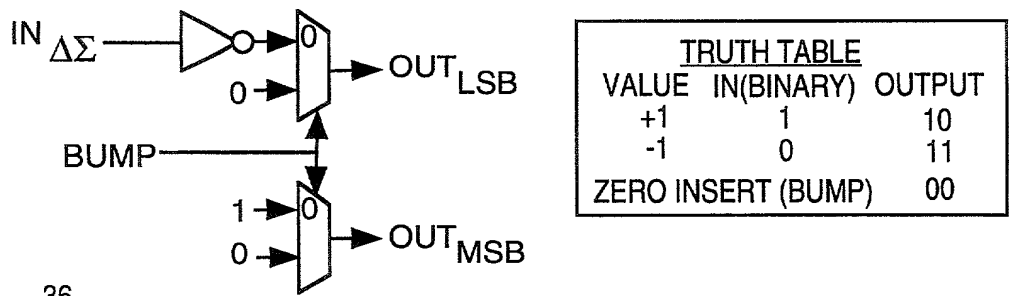
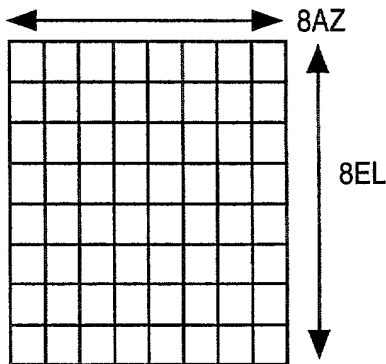
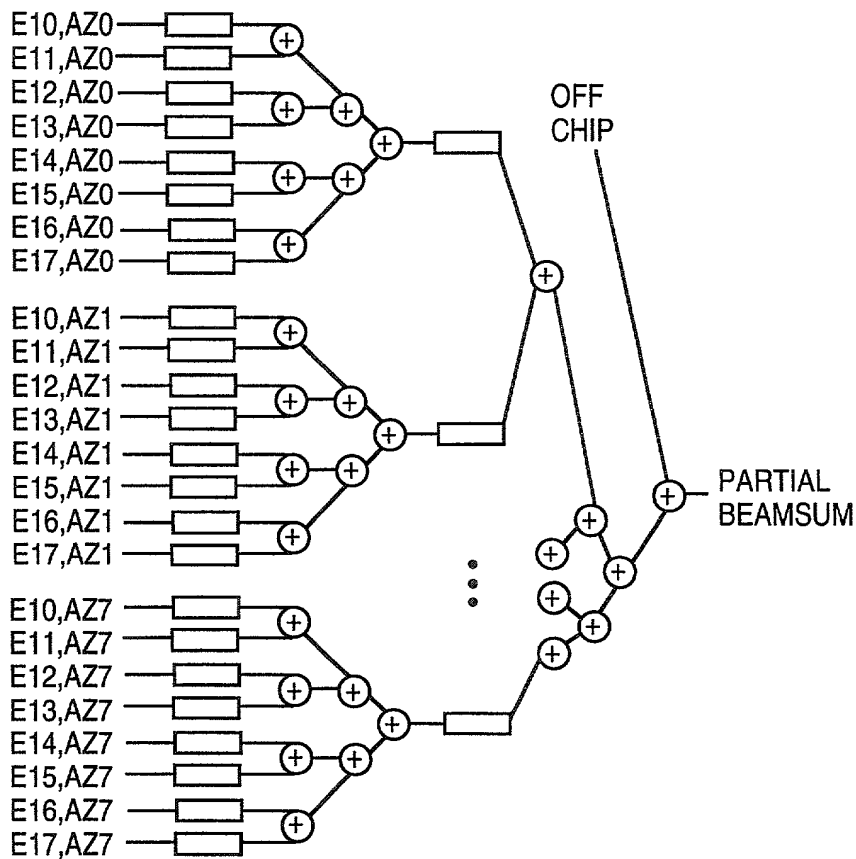
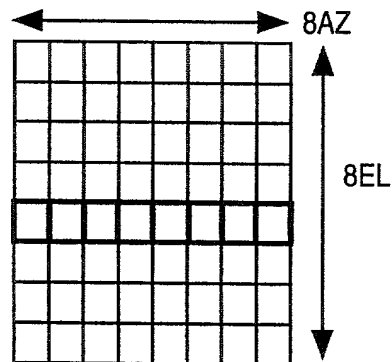
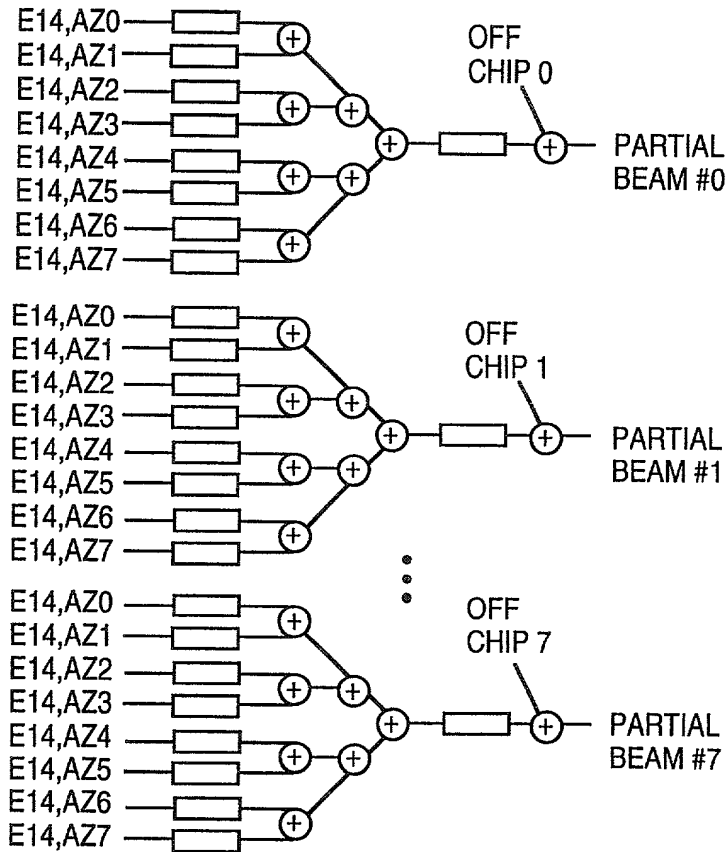


FIG. 33A



NORMAL BEAMFORMER

FIG. 33B

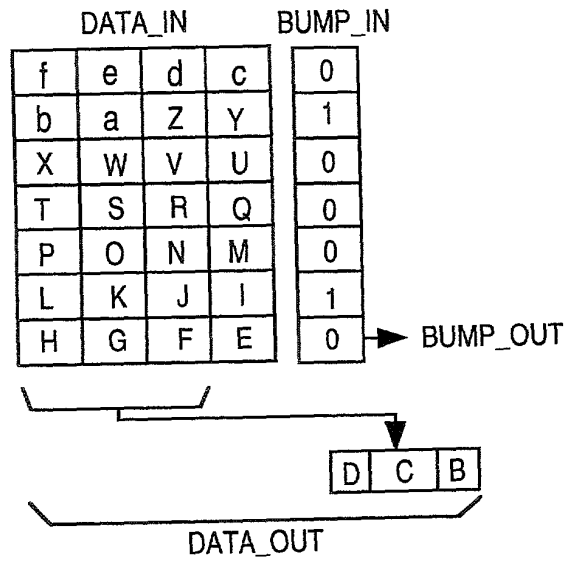


MULTIBEAM BEAMFORMER

FIG. 33B

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FIG. 34



34.40

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FIG. 35A

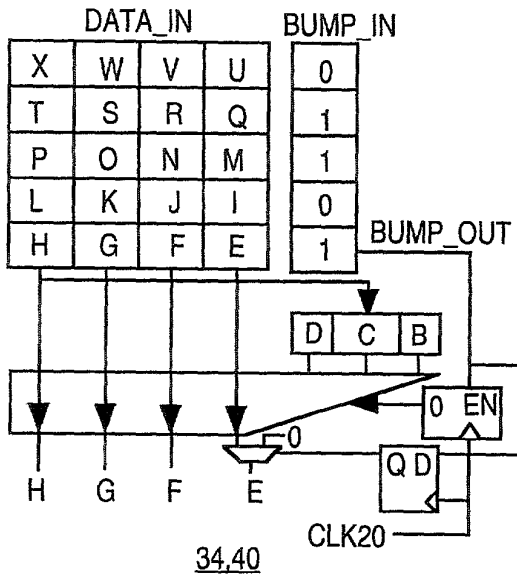


FIG. 35B

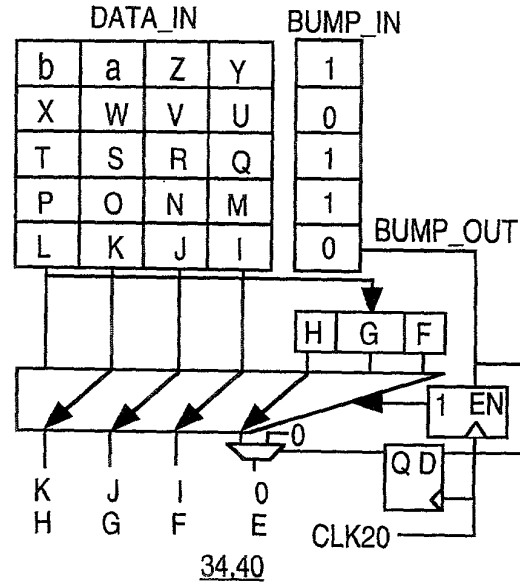


FIG. 35C

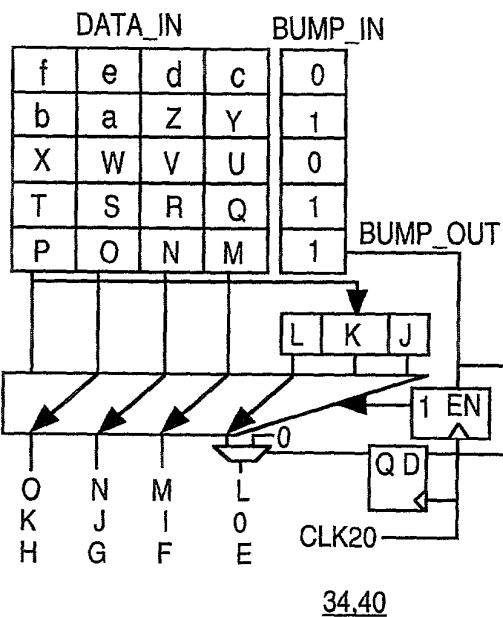
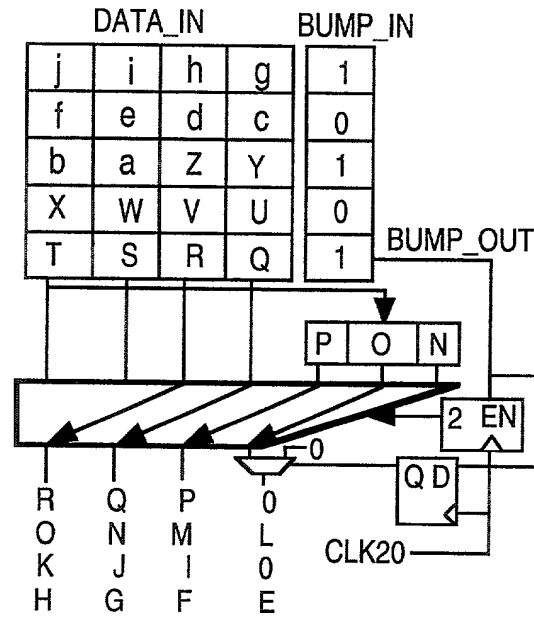


FIG. 35A

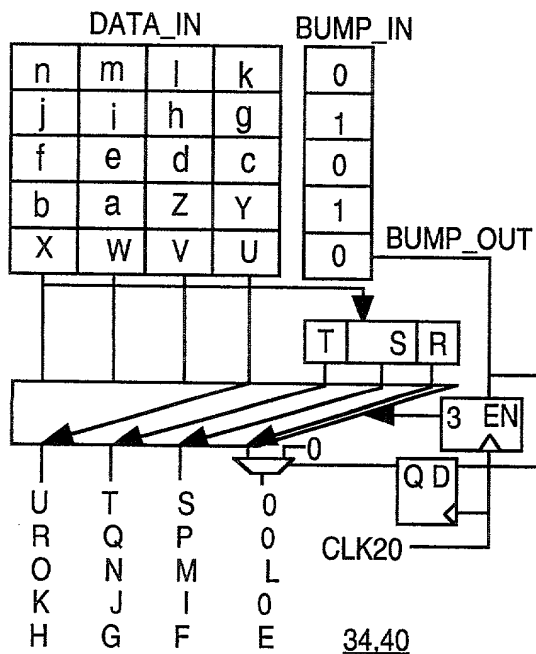
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FIG. 36A



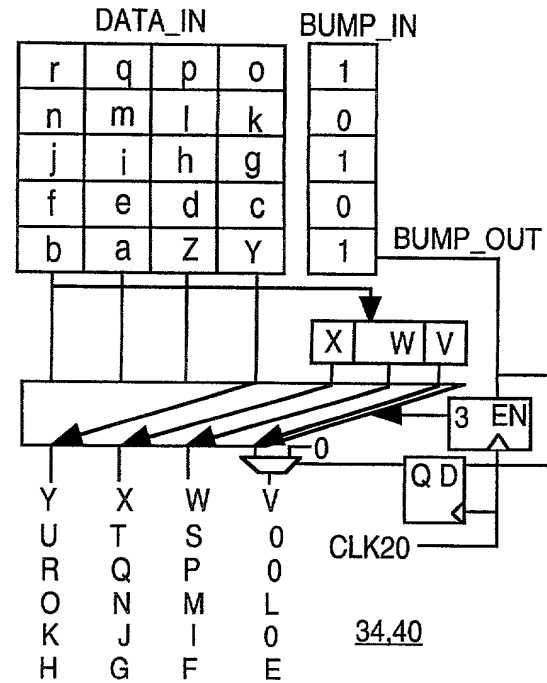
34.40

FIG. 36B



34.40

FIG. 36C



34.40

FIG. 36A

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FIG. 37A

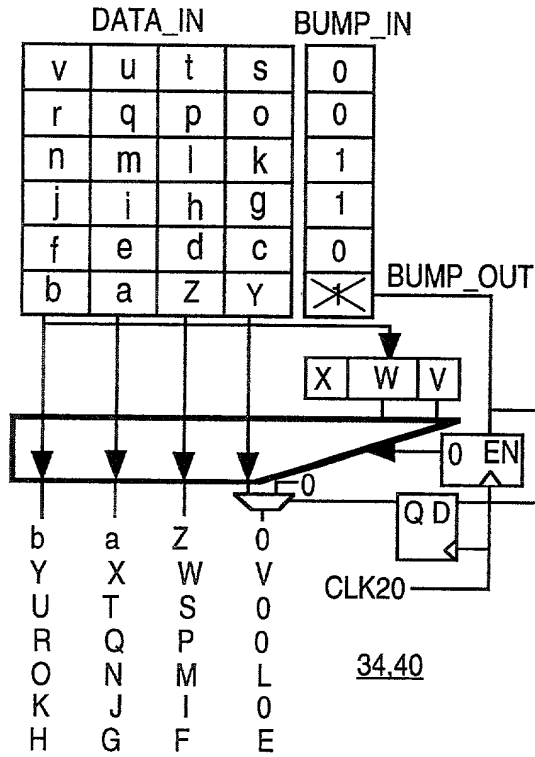


FIG. 37B

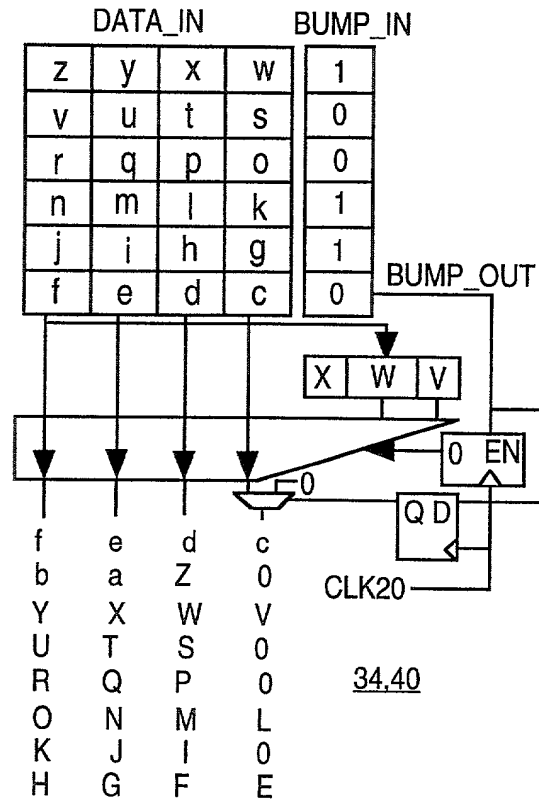


FIG. 37A

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FIG. 38A

UNSIGNED:

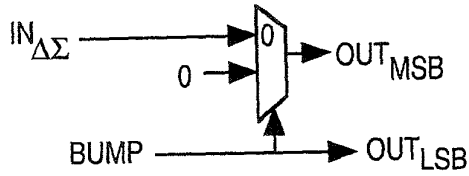


FIG. 38B

SIGNED:

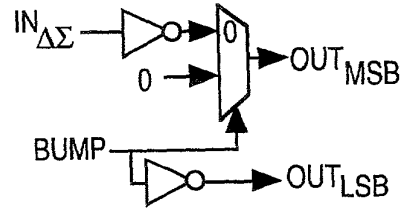


FIG. 38C

UNSIGNED:

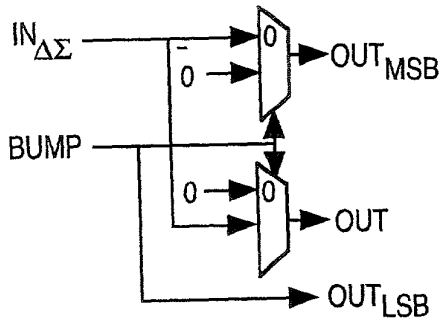


FIG. 38D

SIGNED:

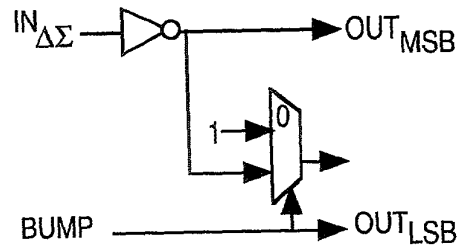


FIG. 38A

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FIG. 39

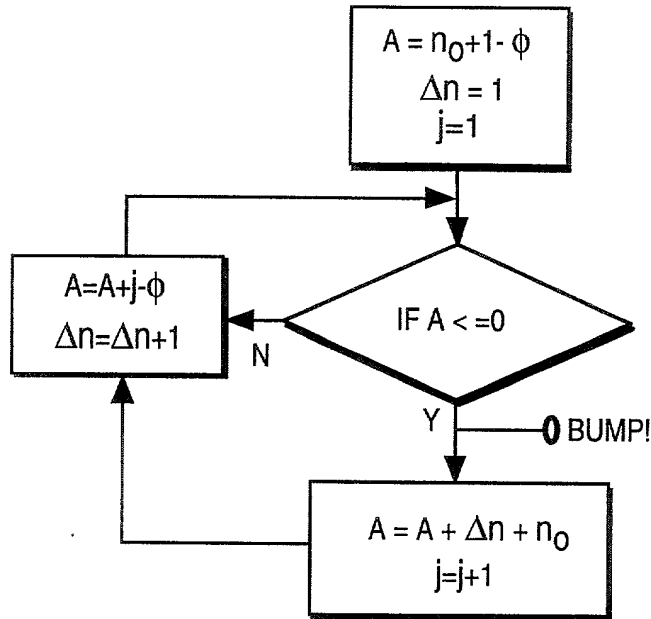


FIG. 40

